

Seq List, Revised  
SEQUENCE LISTING

<110> SCHUURMAN, JANINE  
HAVENITH, KARIN  
PARREN, PAUL  
VAN DE WINKEL, JAN  
WILLIAMS, DENISE LEAH  
PETERSEN, JORGEN  
BAADSGAARD, OLE



<120> HUMAN MONOCLONAL ANTIBODIES AGAINST CD25

<130> GMI-059

<140> 10/714,353

<141> 2003-11-14

<150> 60/426,690

<151> 2002-11-15

<160> 74

<170> PatentIn Ver. 3.3

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<211> 381

<212> DNA

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<220>

<221> CDS

<222> (1)..(381)

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Tyr	
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cct atc aac tgg gtg cga cag gcc cct gga caa ggg ctt gag tgg atg	144
Pro Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	
35 40 45	

gga agg atc atc cct atc ctt ggt ata gca gac tac gca cag agg ttc	192
Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asp Tyr Ala Gln Arg Phe	
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cag ggc aga gtc acg att acc gcg gac aaa tcc acg aac aca gcc tac	240
Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asn Thr Ala Tyr	
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atg gag ctg agc agc ctg aga tct gag gac acg gcc gtg tat tat tgt	288
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	

gcg agg agg gac tgg gga gac tac tgg ggc cag gga acc ctg gtc acc	336
Ala Arg Arg Asp Trp Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr	
100 105 110	

gtc tcc tca gcc tcc acc aag ggc cca tcg gtc ttc ccc ctg gca	381
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## Seq List, Revised

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 35 40 45  
 Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asp Tyr Ala Gln Arg Phe  
 50 55 60  
 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asn Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
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 ttg tct cca ggg gaa aga gcc acc ctc tcc tgc agg gcc agt cag agt 144  
 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
 35 40 45  
 gtt agc agc agc ttc tta gcc tgg tac cag cag aaa cct ggc cag gct 192  
 Val Ser Ser Ser Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala  
 50 55 60  
 ccc agg ctc ctc atc tat ggt gca tcc agc agg gcc act ggc atc cca 240  
 Page 2

Seq List, Revised

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Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	
				85				90						95		
agc	aga	ctg	gag	cct	gaa	gat	ttt	gca	gtg	tat	tac	tgt	cag	cag	tat	336
Ser	Arg	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	
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Ser	Ser	Ser	Pro	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys	
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cga	act	gtg	gct	gca	cca	tct	gtc	ttc	atc	ttc	ccg					420
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Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	
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	50					55					60					
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<220>  
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# Seq List, Revised

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 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Tyr  
 20 25 30

gct atc aac tgg gtg cga cag gcc cct gga caa gga ctt gag tgg atg 144  
 Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45

gga agg atc atc cct atc ctt gat ata gca gac tac gca cag aag ttc 192  
 Gly Arg Ile Ile Pro Ile Leu Asp Ile Ala Asp Tyr Ala Gln Lys Phe  
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cag gac aga gtc acg att acc gcg gac aag tcc acg aac aca gcc tac 240  
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 85 90 95

gcg aga aag gac tgg ttc gac ccc tgg ggc cag gga acc ctg gtc acc 336  
 Ala Arg Lys Asp Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr  
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<210> 6  
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 35 40 45

Gly Arg Ile Ile Pro Ile Leu Asp Ile Ala Asp Tyr Ala Gln Lys Phe  
 50 55 60

Gln Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Asn Thr Ala Tyr  
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95

Ala Arg Lys Asp Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr  
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Seq List, Revised  
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 Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro  
 65 70 75 80  
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 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
 85 90 95  
 agc aga ctg gag cct gaa gat ttt gca gtg tat tac tgt cag cag tat 336  
 Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr  
 100 105 110  
 ggt agt tca ccg atc acc ttc ggc caa ggg aca cga ctg gag att aaa 384  
 Gly Ser Ser Pro Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys  
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## Seq List, Revised

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                   85                          90                          95  
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                   20                          25                          30  
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 gcg agg agg gac tgg gga gac tac tgg ggc cag gga acc ctg gtc acc 336  
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Seq List, Revised  
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           65                  70                  75                  80  
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 ttg tct cca ggg gaa aga gcc acc ctc tcc tgc agg gcc agt cag agt 144  
 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
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## Seq List, Revised

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Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile	85	90	95	
agc aga ctg gag cct gaa gat ttt gca gtg tat tac tgt cag cag tat				336
Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr	100	105	110	
agt agc tca ccg ctc act ttc ggc gga ggg acc aag gtg gag atc aaa				384
Ser Ser Ser Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys	115	120	125	
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Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro	130	135	140	

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 35 40 45  
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 50 55 60  
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 65 70 75 80  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
 85 90 95  
 Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr  
 100 105 110  
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 <222> (1)..(381)



## Seq List, Revised

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tcg gtg aag gtc tcc tgc aag gct tct gga ggc acc ttc agc agg tat 96  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Tyr  
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 Ile Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
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 Gly Arg Ile Ile Pro Ile Leu Gly Val Glu Asn Tyr Ala Gln Lys Phe  
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cag ggc aga gtc acg att acc gcg gac aaa tcc acg agc aca gcc tac 240  
 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr  
 65 70 75 80

atg gag ctg agc agc ctg aga tct gag gac acg gcc gtg tat tac tgt 288  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95

gcg aga aag gac tgg ttt gat tac tgg ggc cag gga acc ctg gtc acc 336  
 Ala Arg Lys Asp Trp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr  
 100 105 110

gtc tcc tca gcc tcc acc aag ggc cca tcg gtc ttc ccc ctg gca 381  
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala  
 115 120 125

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&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 35 40 45

Gly Arg Ile Ile Pro Ile Leu Gly Val Glu Asn Tyr Ala Gln Lys Phe  
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr  
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95

Ala Arg Lys Asp Trp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr  
 100 105 110

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 115 120 125

# Seq List, Revised

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 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser  
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 ttg tct cca ggg gaa aga gcc acc ctc tcc tgc agg gcc agt cag agt 144  
 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser  
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 Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp  
 65 70 75 80  
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 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
 85 90 95  
 aga ctg gag cct gaa gat ttt gca gtg tat tac tgt cag cag tat ggt 336  
 Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly  
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 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser

## Seq List, Revised

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Arg	Leu	Leu	Ile	Tyr	Gly	Ala	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Asp				
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Arg	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Gly				
			100					105						110					
Ser	Ser	Pro	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg				
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	130					135													

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<210> 20  
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 1 5 10

# Seq List, Revised

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<210> 22  
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 1 5

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<400> 23  
 Arg Tyr Ala Ile Asn  
 1 5

<210> 24  
 <211> 17  
 <212> PRT  
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<400> 24  
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 1 5 10 15

Asp

<210> 25  
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<400> 25  
 Lys Asp Trp Phe Asp Pro  
 1 5

<210> 26  
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<400> 26  
 Arg Ala Ser Gln Ser Gly Ser Ser Ser Tyr Leu Ala  
 1 5 10

Seq List, Revised

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1 5

<210> 28  
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<400> 28  
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1 5

<210> 29  
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<400> 29  
Arg Tyr Pro Ile Asn  
1 5

<210> 30  
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<400> 30  
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1 5 10 15

Gly

<210> 31  
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1 5

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<400> 32  
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1 5 10

# Seq List, Revised

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<210> 34  
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<400> 34  
 Gln Gln Tyr Ser Ser Ser Pro Leu Thr  
 1 5

<210> 35  
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 <212> PRT  
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<400> 35  
 Arg Tyr Ile Ile Asn  
 1 5

<210> 36  
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<400> 36  
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 1 5 10 15

Gly

<210> 37  
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<400> 37  
 Lys Asp Trp Phe Asp Tyr  
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<210> 38  
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<400> 38  
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 1 5 10

# Seq List, Revised

<210> 39  
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<210> 41  
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<210> 42  
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<400> 42  
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<210> 43  
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<400> 44  
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<210> 45  
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# Seq List, Revised

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<210> 47  
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<400> 47  
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<210> 48  
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<400> 48  
atggggtcaa ccgccatcct 20

<210> 49  
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<400> 49  
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<210> 50  
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<212> DNA  
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<400> 50  
racatccaga tga yccagtc 20

<210> 51  
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<212> DNA  
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<400> 51  
gycatcyrga tgacccagtc 20

<210> 52  
<211> 20  
<212> DNA  
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# Seq List, Revised

<400> 52 gatattgtga tgacccagac	20
<210> 53 <211> 20 <212> DNA <213> Homo sapiens	
<400> 53 gaaattgtgt tgacrcagtc	20
<210> 54 <211> 20 <212> DNA <213> Homo sapiens	
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<210> 55 <211> 20 <212> DNA <213> Homo sapiens	
<400> 55 gatgttgtga tgacacagtc	20
<210> 56 <211> 20 <212> DNA <213> Homo sapiens	
<400> 56 gaaattgtgc tgactcagtc	20
<210> 57 <211> 24 <212> DNA <213> Homo sapiens	
<400> 57 cccgtcagc tcctggggct cctg	24
<210> 58 <211> 23 <212> DNA <213> Homo sapiens	
<400> 58 ccctgctcag ctccctggggc tgc	23
<210> 59 <211> 26 <212> DNA <213> Homo sapiens	

# Seq List, Revised

<400> 59  
cccagcgag cttctcttcc tcctgc 26

<210> 60  
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<400> 60  
atggaaccat ggaagcccca gcacagc 27

<210> 61  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 61  
cggaagatg aagacagatg 20

<210> 62  
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<223> Ala, Ile or Pro

<400> 62  
Arg Tyr Xaa Ile Asn  
1 5

<210> 63  
<211> 17  
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filed for detailed description of preferred embodiments

<220>  
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filed for detailed description of preferred embodiments

<220>  
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filed for detailed description of preferred embodiments

# Seq List, Revised

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 filed for detailed description of preferred embodiments

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 <223> any natural occurring amino acid; see specification as  
 filed for detailed description of preferred embodiments

<400> 63  
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 1 5 10 15

Xaa

<210> 64  
 <211> 17  
 <212> PRT  
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<220>  
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 <222> (10)  
 <223> Asp, Glu, Asn or Gln

<220>  
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 <222> (14)  
 <223> Lys, Arg or His

<220>  
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 <223> Gly, Ile, Val, Ala, Leu, Asp or Glu

<400> 64  
 Arg Ile Ile Pro Ile Leu Gly Xaa Xaa Xaa Tyr Ala Gln Xaa Phe Gln  
 1 5 10 15

Xaa

<210> 65  
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# Seq List, Revised

<212> PRT  
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<223> Ile or Val

<220>  
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<220>  
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<223> Asp or Asn

<220>  
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<223> Lys or Arg

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1 5 10 15

Xaa

<210> 66  
<211> 11  
<212> PRT  
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<220>  
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filed for detailed description of preferred embodiments

<220>  
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filed for detailed description of preferred embodiments

<400> 66  
Arg Ala Ser Gln Ser Xaa Ser Ser Xaa Leu Ala  
1 5 10

<210> 67  
<211> 11  
<212> PRT  
<213> Homo sapiens

# Seq List, Revised

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 <223> Val, Ala, Leu, Ile or Gly

<220>  
 <221> MOD\_RES  
 <222> (9)  
 <223> Phe, Trp or Tyr

<400> 67  
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 1 5 10

<210> 68  
 <211> 11  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES  
 <222> (6)  
 <223> Val or Gly

<220>  
 <221> MOD\_RES  
 <222> (9)  
 <223> Phe or Tyr

<400> 68  
 Arg Ala Ser Gln Ser Xaa Ser Ser Xaa Leu Ala  
 1 5 10

<210> 69  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES  
 <222> (4)  
 <223> Gly, Ala, Val, Leu, Ile, Ser or Thr

<220>  
 <221> MOD\_RES  
 <222> (8)  
 <223> Leu, Gly, Ala, Val or Ile

<220>  
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<210> 70  
 <211> 9  
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# Seq List, Revised

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<222> (4)

<223> Gly or Ser

<220>

<221> MOD\_RES

<222> (8)

<223> Leu or Ile

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Gln Gln Tyr Xaa Ser Ser Pro Xaa Thr  
1 5

<210> 71

<211> 96

<212> PRT

<213> Homo sapiens

<400> 71

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
85 90 95

<210> 72

<211> 98

<212> PRT

<213> Homo sapiens

<400> 72

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser  
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr  
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
35 40 45

Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asn Tyr Ala Gln Lys Phe  
50 55 60

# Seq List, Revised

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Ala Arg

<210> 73  
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<212> PRT  
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<220>  
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<223> any natural occurring amino acid; see specification as  
filed for detailed description of preferred embodiments

<220>  
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<222> (3)  
<223> any natural occurring amino acid; see specification as  
filed for detailed description of preferred embodiments

<220>  
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<222> (5)  
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filed for detailed description of preferred embodiments

<400> 73  
Xaa Tyr Xaa Ile Xaa  
1 5

<210> 74  
<211> 5  
<212> PRT  
<213> Homo sapiens

<220>  
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<222> (1)  
<223> Arg, Lys or His

<220>  
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<222> (3)  
<223> Ala, Gly, Val, Leu, Ile or Pro

<220>  
<221> MOD\_RES  
<222> (5)  
<223> Asn or Gln

<400> 74  
Xaa Tyr Xaa Ile Xaa  
1 5